model was adjusted. Diabetics and non-diabetics were analysed separately. Data on effectiveness of 12 month treatment were taken from RIO-Diabetes (overweight/obese patients with T2DM) and RIO-Europe (overweight with co-morbidities/obese patients, without T2DM), respectively. Cost data were derived from published sources for the year 2006 using €2.39 as daily costs of rimonabant. A time horizon of 40 years and a discount rate of 3% were applied. Input model data were varied plus/minus 20% performing sensitivity analyses. **RESULTS:** The model shows that adding rimonabant to diet and exercise, in patients with BMI ≥30 kg/m^2, or BMI >27 kg/m^2 and additional risk factors leads to an increased life expectancy as well as an improved quality of life. Costs per LYG were €12,322 (diabetics) and €46,966 (non-diabetics). Costs per QALYG were €8,788 (diabetics) and €12,590 (non-diabetics). Considering the internationally utilized threshold of €50,000 per QALYG, the treatment with rimonabant can be assessed as cost-effective. The robustness of this result was substantiated through sensitivity analyses. **CONCLUSION:** Based on the results of the Rainbow model, treating patients with rimonabant in combination with diet and exercise is associated with a benefit in effectiveness at acceptable costs from a SHI-perspective, compared to a modification of lifestyle alone.

PCV32

COST-EFFECTIVENESS OF IRBESARTAN IN THE TREATMENT OF PATIENTS WITH HYPERTENSION, TYPE-2 DIABETES AND RENAL DAMAGE IN MEXICO

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OBJECTIVES: To perform a cost-effectiveness analysis of irbesartan for the management of nephropathy in patients with hypertension, type-2 diabetes and microalbuminuria in the Mexican scenario. **METHODS:** The treatment of patients was simulated with early irbesartan, 300 mg daily (initiating in the microalbuminuria stage) and late irbesartan (initiating in the stage of manifest nephropathy). These strategies were compared with a control, consisting of standard anti-hypertensive therapy. The progression of microalbuminuria to nephropathy, increase to the doubling of serum creatinine, end stage renal disease (ESRD) to death, was simulated over a temporary horizon of 20 years, using a Markov model previously published and adapted to the Mexican scenario. The transition probabilities were based in the study named Irbesartan in Reduction of Microalbuminuria-2, and the study called Irbesartan in Diabetic Nephropathy Trial, and local sources. The costs and clinical outcomes were discounted to an annual rate of 3%, and the perspective of the public health care institutions in Mexico. **RESULTS:** With early irbesartan there was a gain of 539.1 years of life per 1000 treated patients, and with late irbesartan there was a gain of 131.1, both compared to control. After 20 years of treatment, early irbesartan prevented 87 cases of ESRD per 1000 patients treated, and late irbesartan prevented 54, both compared to control. The cost per life-year gained with early irbesartan was €22,998.93 and the cost per year free from ESRD with late irbesartan was €11,503.94. The sensitivity analysis showed that therapy with irbesartan is still cost-effective compared to conventional antihypertensive treatment after modifying various plausible assumptions. **CONCLUSION:** The addition of irbesartan to conventional antihypertensive therapy demonstrated an improvement in life expectancy and reduction in the years with ESRD. It represented a cost-effective option compared to control, which means greater efficiency in the treatment of hypertension patients with type-2 diabetes and microalbuminuria in Mexico.

PCV33

RESOURCE USE AND TREATMENT COSTS FOR ACUTE DECOMPENSATED HEART FAILURE: ECONOMIC ANALYSIS OF THE SURVIVE TRIAL

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OBJECTIVES: Acute decompensated heart failure (AHF) is life-threatening and a frequent cause of hospitalization for older persons. The SURVIVE randomized controlled trial compared levosimendan (levo) versus dobutamine (dob) with 180-day mortality as primary endpoint. All-cause mortality at 31 days was levo 12% and dob 14% (hazard ratio 0.85, p = 0.29) with a similar differential at 180 days (HR 0.91, p = 0.40). Presented here is the SURVIVE economic analysis. **METHODS:** SURVIVE was conducted in Russia, Poland, France, Israel, Finland, UK, Latvia, Germany, and Austria. Enrolled patients (N = 1327) required IV inotropic support after insufficient response to IV diuretics or vasodilators. Case report forms (CRFs) documented study drug administration, inpatient days (ICU, routine care), procedures (e.g., PTCA, CABG, ICD), and safety data, during initial admission. CRFs also described subsequent admissions during follow-up. Hospital cost was calculated according to length of day and procedures. Source of cost data was national hospital payment schedules for France, Germany, and UK. Cost for levo was not included in base case analysis. Cost-effectiveness analysis used average market price for levo with post-trial survival projected per published AHF methodology. **RESULTS:** Length of stay (days) during initial admission was identical (levo 14.4, dob 14.5, p = 0.96). During follow-up similar patterns were observed for number of hospital admissions (levo 0.7, dob 0.9, p = 0.25) and total hospital days (levo 11.5, dob 12.4, p = 0.46). Mean cost of initial hospital admission was similar (levo €5060, dob €4945, p = 0.91) as was total hospital cost for the complete trial episode (levo €5471, dob €5273, p = 0.93). Incremental cost per life year gained for levo relative to dob was less than €27,000 with greater than 50% likelihood. **CONCLUSION:** In SURVIVE hospital resource use and costs were similar for levo and dob. Based on the survival difference, levo is cost-effective relative to dob using accepted benchmarks.

PCV34

COST-EFFECTIVENESS OF ATORVASTATIN PLUS AMLODIPINE VERSUS ATORVASTATIN PLUS ATENOLOL IN HYPERTENSIVE PATIENTS WITHOUT PREVIOUS CORONARY HEART DISEASE, NORMAL TO MILDLY ELEVATED CHOLESTEROL LEVELS AND AT LEAST 3 CARDIOVASCULAR RISK FACTORS

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OBJECTIVES: To assess the cost per quality-adjusted-life-year (QALY) of Atorvastatin 10 mg (ATV) + Amlodipine 5/10 mg (AML) compared with Atenolol 10 mg (ATE) + ATV, in hypertensive patients with no history of coronary heart disease (CHD) with normal to mildly elevated cholesterol and with at least 3

additional cardiovascular-risk-factors (ASCOT-LLA patients). ASCOT-BPLA study compared 2 different antihypertensive strategies (ATE+/–Bendroflumethiazide+/–Doxazosin) and AML (+/–Perindopril+/–Doxazosin) to reduce cardiovascular events in 19,257 hypertensive patients. AML demonstrated less all cause mortality than ATE ($p = 0.025$). A sub-study (ASCOT-LLA) comparing ATV to Placebo (PCB) in patients with ≤250 mg/dL was carried out. The ASCOT-LLA was early interrupted because of a significant reduction in the primary endpoint in favour of Atorvastatin. A factorial analysis of ASCOT-LLA (ATV + AML; PBO + AML; ATV + ATE; PBO-ATE) demonstrated a 53% relative risk reduction of ATV + AML versus PBO + AML ($p < 0.0001$); and of 39% for ATV + AML versus ATV + ATE ($p = 0.016$). **METHODS:** Two hypothetical cohorts of ASCOT-LLA like patients were simulated for a 25 years time horizon under the perspective of the National Health System, by a Markov model. Spanish costs (€2005) of ATV, AML, ATE, Peridonpril and Bendroflumethiazide were taken into account. Effects were based on results of the ASCOT 2x2 analysis: ATV + AML versus ATV + ATE. Results are expressed as incremental cost-effectiveness ratio (ICER) per QALY. Costs and effectiveness outcomes were discounted at a rate of 3% and 5% per year, respectively. **RESULTS:** The basecase analysis demonstrates that ATV + AML strategy is a more effective alternative with an acceptable increase in costs: ICER of ATV + AML was 17.334€ per QALY. **CONCLUSION:** Atorvastatin + Amlodipine is a cost-effective strategy when compared with Atorvastatin + Atenolol for the treatment of hypertensive patients with no prior history of cardiovascular disease, normal to mildly elevated cholesterol levels and with at least 3 additional cardiovascular-risk-factors, being under the threshold of 30.000€ per QALY usually accepted in our environment.

PCV35

USE OF DRUG-ELUTING STENTS IN THE THERAPY AND PREVENTION OF RESTENOSIS: AN ECONOMIC EVALUATION FOR THE SICILY REGIONAL GOVERNMENT IN ITALY

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OBJECTIVES: To evaluate clinical and economic benefit of Drug Eluting Stents (DES) in comparison with Bare-Metal Stents (BMS) and surgical treatment with coronary artery bypass graft (CABG) for Sicily Regional Government. **METHODS:** Cost-effectiveness analysis was carried out by two decision models: patients treated with DES vs. BMS. Cost was carried out from the point of view of the SSR (Servizio Sanitario Regionale, Regional Health Service). **RESULTS:** The use of DES generated unitary differential savings of €9,003, after 9 months of follow-up, and total differential savings of €4,114,371. The use of DES on patients destined to BMS gave average unitary differential savings of €1,075, after 9 months of follow-up, and average total differential savings of €927,875. The use of DES instead of BMS and CABG allowed SSR to make average differential savings of €3,735 per successful case. A total of €2,476 represent the refund threshold value of DES, setting to zero the SSR average differential savings for patients treated with DES who would otherwise have been treated with BMS. **CONCLUSION:** Results of the proposed models, tested with sensitivity analysis, demonstrate the use of DES to be justified; moreover, these results could positively influence the attitude of the SSR towards these new therapeutic strategies, which are an improvement on standard therapies, both from a clinical and a financial standpoint.

PCV36

COST-EFFECTIVENESS OF THE MANAGEMENT OF FAMILIAL HYPERCHOLESTEROLAEMIA WITH A PREVENTIVE TREATMENT ATORVASTATIN-BASED

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OBJECTIVES: Familial hypercholesterolemia (FH) is characterized by elevated LDL-Cholesterol and premature cardiovascular disease. To evaluate the efficiency of preventive strategies, a cost-effectiveness model was developed: treatment in real clinical practice, different atorvastatin dosage in monotherapy 40 mg (A40) or 80 mg (A80) and atorvastatin combined with Ezetimebe 10 mg (A40 + E10, A80 + E10). **METHODS:** A Markov model under National Health System perspective and with a timeframe of all life expectancy was developed. Spanish life tables (2002) were modified with standard mortality rate for FH population (1.59; IC-95% = 1.07–2.26) to convert the reduction of mortality into life years gained (LYG). Treatment effectiveness was transformed in CV mortality reduction by using risk reduction based on Framingham risk score. Statins, clinical management and pharmacological costs were taken into account (Spanish costs €2005). Costs and effectiveness were discounted at a rate of 6% and 3% per year, respectively. **RESULTS:** 1) Basecase scenario (BS), based on Spanish FH database would represent 1.97 LYG per patient in comparison to no treatment, costs due statins were €5.321, other management costs (MC) €23.389 and total costs (TOC) €28710; 2) A40: 2.59 LYG, MC was reduced 4.5% in comparison to BS; TOC were €30.569; 3)A80: 2.75 LYG, reduction of MC:6.4%, and TOC: €30.133; 4)A40 + E10: 3.38 LYG, reduction of MC:14.3% and TOC: €36.104; and 5)A80 + E10: 3.62 LYG, reduction of CM: 17.6% and TOC: €35.317. Management strategies from more to less efficient incremental cost-effectiveness rate (ICER) per LYG in comparison to BS were: a) A80: €1.821; b) A40: €3.012; and c) A80 + E10: €4.021; and d) A40 + E10: €5.250. **CONCLUSION:** Management of FH with atorvastatin-based treatment is an efficient strategy: Atorvastatin 80 mg in monotherapy is the most efficient. If LDL therapeutic goals with Atorvastatin 80 mg are not achieved, the concomitant use of Ezetimibe can give an additional effect with an acceptable incremental cost.

PCV37

COST-EFFECTIVENESS OF ATORVASTATIN, ROSUVASTATIN, AND SIMVASTATIN IN REDUCING LDL-CHOLESTEROL TO MEET THE EUROPEAN TARGET LEVEL—BAYESIAN META-ANALYSIS AND SIMULATION

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OBJECTIVES: To evaluate the cost-effectiveness of atorvastatin, rosuvastatin, and simvastatin in reducing LDL-cholesterol (LDL-C) and in treatment of patients with high risk of fatal cardiovascular disease to meet the European LDL-C target level of 2.5 mmol/l. **METHODS:** The efficacy of statins in terms of mean percent reduction in LDL-C was determined by literature review and Bayesian random effects meta-analysis. A simulation model was created to evaluate the proportion of patients treated to the LDL-C target (PTT) level of 2.5 mmol/l. The uncertainty related to the independent variables was modeled with Bayesian MCMC-simulation with the use of WinBUGS software. The measures of cost-effectiveness were calculated by annual medicine costs per PTT and by incremental cost-effectiveness ratios (ICERs). The annual medicine costs were